

Evaluation of the current condition of Montrose House, Mpophomeni, KwaZulu-Natal Province-November 2007



Prepared for:

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1. Introduction:

Debbie Whelan from Archaic Consulting was approached by Claire Adderley from the Howick Museum, with regards to carrying out an inspection of Montrose House at Mpophomeni, with the view to all or part of it becoming a museum. This report was intended to provide a guideline for the repairs to the house, and as a document that could be used to support funding and tender applications.

2. Methodology and statement of expertise:

The means by which Montrose House has been assessed, and the recommendations submitted are intended to provide **guidelines for its repair**, and **appropriate reuse as a museum building**. The intention is not to restore the house to a non-sustainable 'former glory', but rather to work with it appropriately in a sustainable and manageable manner, which the new end-users appreciate as well as the owners of the building, The Umngeni Municipality.

This means that the work that will be undertaken will be largely 'repair' than 'replace'. The recommendations put forward will take cognizance of its context and its situation as a government building within a municipal structure.

It is also responsible to assess the property and provide recommendations which act in the best interests of economics and environmental sustainability- this involves the consolidation of electrics, and the capturing of rain water.

A site inspection was carried out on Wednesday 24th October 2007.

3. Executive Summary

Generally speaking, Montrose House is in reasonable condition given the circumstances. Much of the damage that has been done is of a negligent nature, and is related to two specific issues, namely the cats-claw creeper and lack of maintenance of the valley gutters. The building is highly redeemable!

The approach in this report has been to generally assess the damage, and the prioritised issues highlighted in the room-by-room breakdowns. Where repair is critical, this is noted, where necessary noted, and where cosmetic, and therefore low priority, also noted. Sanding of floors is not regarded as even a cosmetic issue at this stage as it is expensive and disruptive, whereas repairing the sash windows using a properly qualified carpenter is more important.

More important are the recommendations regarding the long term tenure and use of the building as it is these that minimize the maintenance and protect it for longer. This also involves retraining of staff, and appropriate monitoring of items such as air-conditioners and heaters.

Decisions also had to be made regarding the treatment of most of the windows, the glazing to the French doors and the manner in which new items, such as guttering, are applied. These were made in the context of this being a municipal building in a policed area, as much taking cognizance of the fact that the site and nature of the structure is in an area where poverty means that security is not always predictable.

4. General statement of significance and legislative context

Montrose House is a good example of a veranda farm house constructed of random-coursed stone as well as coursed stonework under a multiple-ridged complex corrugated-sheeting roof. It has a veranda to two-and-a-half sides, and is sited in a valley which in the past maximized both its shelter from the elements as well as its proximity to water. It is situated at Mphophomeni, a town some fifteen kilometers outside Howick, KwaZulu-Natal. Associated with it are a number of outbuildings which do not form part of this current study, but did in the past form part of a functioning farm.

Montrose House is situated on the farm Rietvallei which originally formed part of a Boer land grant of 6000 acres, being granted to the Pretorius family. Legend has it that Andries Pretorius used a stone fort on the farm in defence against the British. In 1855 the property was purchased by Dr William Addison, a Byrne Settler who came originally from Addington Park in Kent. He is responsible for the building of the homestead. Indeed, his son, Charles Brabazon Addison gives his residence as being at this farm in the 1890 Almanac. CB Addison was responsible for starting the Umhlathuze Valley Sugar Company before tragically dying of Blackwater fever whilst hunting elephant in Tanzania. This family also owned a successful sugar farm, also called Addington which was at New Guelderland.

Rietvallei Farm was bought in 1911 by Charles Lund and ES Goodwill. Charles Lund served the community in a generous fashion, dying during a Natal Provincial Council meeting. Guy Lund took over the property in 1923 after this event. The Lund family remained in it for many decades.

Tragedy struck when the property was expropriated for the formation of Mpophomeni Township, a construct of the then South African Government to remove as many of the workers from living in KwaMevana, that worked for British Tyre and Rubber, now Dunlop. Guy Lund was so affected by this expropriation that he committed suicide. The site of Montrose House is thus poignant- not only were the families of the people settled in Mpophomeni deeply affected by the move, but also the members of the family that suffered from expropriation in the name of separate development.

The house has been subject to the usual accretions and additions in its history. Brian Kearney considers the house as "This is a fine example of a midlands farmhouse in the Natal veranda style. The floor plan develops along an extended axis and has veranda to three sides. The spreading corrugated iron roofs are of a complex form and shelter stone walls' (Kearney; 1988: 20)

Montrose House's early history as part of a Voortrekker farm, the cognizant architectural manipulation of the old, simple two-roomed structure into a formal residence, and its subsequent poignant participation in the structural creation of apartheid policy make it a unique example of a building that has a multitude of historical, social, and political links in KwaZulu-Natal.

It is in very good structural and material condition considering its lack of recent maintenance, and, together with appropriate interpretation, can be used to convey a message as to the endurance of old buildings, in addition to the manner in which they should be looked after.

Should Montrose House be considered for listing as a Provincial Heritage Landmark under the *Amafa KwaZulu-Natal* Heritage Act no 10 Of 1997, as the South African Heritage Resources Agency Heritage Act no 27 of 1999, then the Museum Board should insist on completion by staff of monthly maintenance schedules, for submission to *Amafa* for approval and support.

Given that the house is over 60 years old, it is protected by the KwaZulu-Natal Heritage Act no 10 of 1997. Alterations and repairs to the property will have to be submitted to *Amafa* for approval, and the work must be carried out by a competent and approved contractor who has experience in judicious repair work.

5. Evaluation of the house

5.1 General

The house is in comparatively good condition. However, most of its problems are related to the incursion of the voracious cats-claw creeper and lack of maintenance regarding control of water.

- **Cats-Claw creeper (*macfadyena unguis-cati*)**

This invasive creeper is prevalent in the house, causing much damage particularly on the southern side, where it has climbed into the roof space. It has also entered the walls through the mortar joints penetrating the ladies bathroom. At plinth level, also on the southern elevation, it has begun to pop out of the stonework, again displacing the mortar and creating apertures for penetration of water. On the north elevation, the cats-claw creeper is vigorous at ground level, close to the walls and foundations.

In the roof, cats-claw has penetrated the corrugated sheeting and assisted in the damage to the structure of the valley gutter above the ladies bathroom, also damaging guttering and fascias.

Also, particularly problematic is the manner in which it has inveigled its way into the timber of the sash windows, causing further degradation of the timberwork on the southern side.

Thus, the most critical issue is eradicating, by some means, the cats-claw creepers, improving the efficacy of the water-drainage and replacing the rainwater goods.



Fig 1: the creeper at ground level



Fig 2: the creeper at roof level

- **Lack of maintenance in the recent past**

As with all buildings, both new and old, maintenance is a critical part of the longevity of the structure. In the last number of decades, some reactive work has been done, and some also some aesthetic work which was not necessarily appropriate. The complete disintegration of the rainwater goods on the south side of the building is a case in point. (see fig 3) Putting into place maintenance guidelines will also be a valuable part of this study. See *Chapter 6- operational recommendations and maintenance* in this regard.



Fig 3: disintegration of rain water gutters

- **Beginnings of wood borer beetle invasion**

On preliminary inspection, there is evidence of the invasion of some wood-borer beetle in the skirting around the ladies toilets. This should be remedied as soon as possible. A full inspection for evidence of wood-borer and termites should be carried out by approved fumigators. The inclusion of this information in a maintenance plan is discussed in Chapter 6

- **Damage by rats**

Some of the doors and skirting have been damaged by rodent activity. The presence of rats should also be addressed by the fumigators, and as a public building and potential museum, permanent methods be put into place for their control.

The damage itself does not seem to be recent or extensive, and the repair of this is more aesthetic than necessary.

- **Unconscious methods of current use**

Issues regarding the manner in which the house is currently, or has been recently, used, are discussed in the chapter 6- operational recommendations and maintenance.

- **Lack of consolidation- services added as a reaction rather than being planned**

Much of the low key damage to Montrose House has been as a result of reactive decisions, regarding the need for air-conditioning, electrics, electronics such as computers and alarm systems. The manner in which these services have been introduced show generations of technology, with the old wiring simply been left in place.

Consolidation of the electrics and electronic goods into planned wall mounted trunking, will alleviate random alterations. Consideration of new work should be factored into the maintenance plan as offered in *Chapter 6- Operational recommendations and maintenance*.

- **Un-maintained bathroom spaces and un-maintained drainage areas**

Bad initial planning of the wet core comprising the male and female toilets and kitchen area, and their subsequent maintenance has created large problems on the southern side. In addition, the blocked external drains, and resultant boggy ground do the structure and the materials no favours.

5.2 Approach in assessment

Most of the windows on the south side and the west are damaged, largely through weathering. In all of these cases, it is recommended that each window frame, sill, reveal and box if necessary, be sanded, repaired where necessary and re-varnished with a good quality external varnish. The rest of the windows should be reglazed where necessary, and the putty replaced in all the panes.

Regarding the French Doors: At the moment there is a mixture of glass and Perspex inserted in the panes. This is perhaps a security issue as much as a practicality of constant replacement. Whilst the ideal situation would be to replace all the panes with glass, the longevity of the solution cannot be guaranteed. At the moment the three French doors on the north elevation lack burglar guards. A suggestion would be to mount a purpose made 'Trelli-Door' type security gate, finished in black, on the outside face. This would provide security, fold away when needed, but also 'disappear' into the façade when closed against the doors.

Air-conditioners that are floor mounted in each of the rooms where it is noted in the tables below should be removed and then the moulded skirtings behind them replaced with an Oregon skirting of the same profile.

Floors, doors and door frames, and skirtings are generally in good condition and do not need much repair other than where indicated. Sanding the floors is a big, unnecessary and expensive exercise which may also detract from the feel of the house- it is not a priority at this point.

5.3 roof space

General:

The roof space of Montrose House is accessible from a single trap door above the passage into the ladies bathrooms.

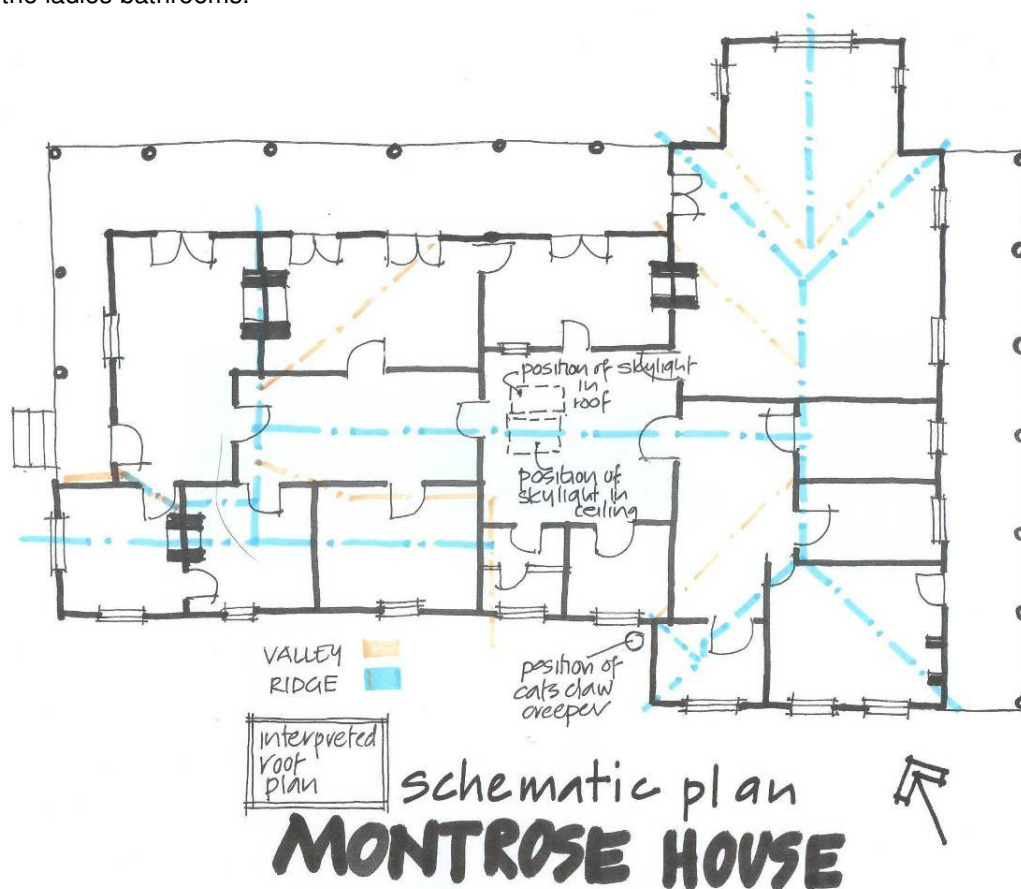


Fig 4: Roof plan

An inspection was made of this roof space, which assisted in the formation of the submitted recommendations. From the outside, the condition of the roof appeared irredeemable, but once inside the roof-space, which was dry given all the recent rains, the condition of the corrugated sheeting was discernable, as well as the condition of the ceiling boards and the structural timbers.

The first point that was evident was that the oldest part of the house (suggested by the irregular interruption in the roof pitch on the south side) consists of the three rooms constructed out of random rubble. The eastern gable of this pops up into the ceiling space, together with its ventilator panel.

- The corrugated sheeting showed little evidence of internal rust. It is in good condition despite the lack of maintenance, but does have a few puncture holes in places which let in the rain.
- The most problematic issue is the penetration of the cats-claw creeper
- Also, there are major junctions that need remedial work, viz:
 - the connection between the above-mentioned original structure and the main roof
 - the flashing around the skylight
 - flashing around all chimneys
 - repair and replace all the valleys.

Recommendations:

Remove cats-claw creeper in roof space

Scrape old paint of roof

*Check all roofing nails replace those where necessary
 seal those where necessary*

Replace all flashing to the chimneys

Replace flashing to the skylight and seal

Repair ventilator and finial to the eastern elevation and repaint

Sand down skylight in the roofspace, replace the tongue-and-groove where necessary, and repaint.

Replace roof vent in the north elevation

Eradicate birds

Paint roof with a galvanized etch primer and repaint roof with two coats of roof paint, red-oxide.

Replace all gutters and down-pipes with a half-round galvanized iron gutter, painted.

Veranda roofs:

These timbers are exposed more than the main roof, and therefore have a higher potential for decay. The raking purlins in all the veranda roofs are in need of repair or replacement. The rafters suffer most in the join with the main roof, a common problem with changes in roof pitch between the steeper main roof and the shallower verandas. The specific detail of each veranda roof is discussed in along with the relevant elevation.

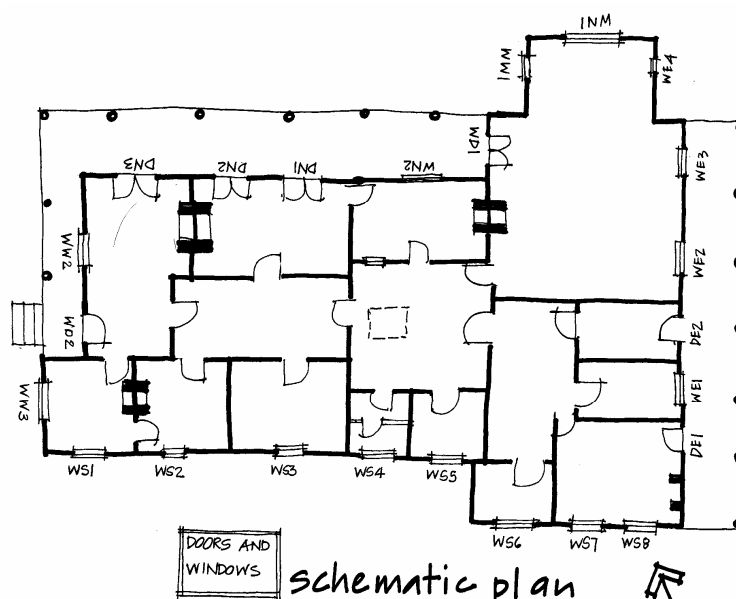


Fig 5: Door and window layout

5.4 southern elevation

critical	necessary	cosmetic
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Overall intention: to remove all possible generated damp, limiting foundation collapse and building decay.

Window number	type	panes replace	Condition Upper	Condition lower	action
Window S1	Box sash	3	bad	bad	Remove, rebuild, replace
Window S2	Box sash	1	bad	bad	Remove, rebuild, replace
Window S3	Box sash	1	bad	bad	Remove, rebuild, replace
Window S4	Box sash	1	bad	bad	Replace plywood in lower sash with single pane of opaque glass
Window S5	Box sash		bad	bad	Remove, rebuild, replace
Window S6	Box sash	2	bad	bad	Remove, rebuild, replace
Window S7	Box sash		bad	bad	Remove, rebuild, replace
Window S8	Box sash	2	bad	bad	Remove, rebuild, replace

This elevation is notable for the presence of a well established cats-claw creeper in the corner between the ladies toilet and the office space. This creeper has not only damaged the roof, the gutters, the fascias, the mortar and the windows, but has invaded the house through cracks which enlarges them.

- This creeper must be removed, preferably the bulbs dug out. This would entail an excavation close to the foundations, and for this, underpinning may be necessary, resulting in the appointment of an engineer, without necessary total removal. As the current method of eradicating cats-claw creeper is through total removal this may be problematic, and a biological means of killing it may be preferably explored. Commonly used pesticides such as *Garlon* and *Roundup* have little efficacy in this regard. There are smaller creepers all along this elevation, popping up through the mortar joints and damaging the stonework at plinth level, as well as adding further degradation to the windows. These also have to be dealt with.
- The air-conditioner units situated on the ground assist in the creation of a damp atmosphere. They should be removed with all their electrics and piping.
- Replace all gutters and down-pipes with half-round galvanised iron, painted.
- Strip bargeboards, sand, re-prime with wood primer and repaint with two coats white enamel. Replace portions of these judiciously and treat in the same manner.
- Repair all elements of the windows. They will have to be removed from their boxes and transoms and mullions replaced where necessary.
- The sanding and re-varnishing of the lintols is important from a structural point of view.
- Cut back the bottlebrush as it interferes with the gutters and the roof.
- Replacing the sash cord and the weights in the windows is not essential. This is with the exception of a window on the eastern elevation. Most of the windows have been nailed shut and thus are non-operational anyway. Maintaining the house as an airtight environment is recommended should it become a museum space.

5.5 eastern elevation

critical	necessary	cosmetic
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Overall intention: general repair to elements

This elevation is currently where the main entrance is situated, and, ironically, to enter into what used to be the kitchen. The land slopes down to the veranda level, which has to be monitored in terms of adequate drainage from higher ground.

With regard to the numbering of the windows, columns and rafters, count from the left of the elevation and proceed to the right.

Window number	type	No panes	Condition Upper	Condition lower	action
Window E1	Box sash	1	good	good	This acts as a payment hatch- needs repair with new sash cord and lock to keep it up.
Window E2	casement		good	good	none
Window E3	casement	1	good	good	none
Window E4	casement		OK	OK	Strip, treat and re-varnish- cut back trees
Door E1	Solid oregon		good	good	The lock needs to be cut out, and an Oregon insertion with a new lock set needs to be put in
Door E 2	Solid oregon		good	good	none

- The timberwork to the ventilator has to be stripped down, assessed, repaired where necessary and the finial repaired and replaced
- The raking purlin on the veranda needs stripping and judicious repair.
- The central purlin between rafters 8 and 10 needs scraping, assessment and repair, before repainting.
- Rafter no 9 needs to be assessed and repaired if necessary, before being repainted.
- The third column needs the base to be removed and a new piece of similar Oregon pine inserted. Liaise with *Amafa* as to the possibilities of materials from the Materials Bank.

5.6 northern elevation

critical	necessary	cosmetic
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Overall intention: general repair to elements as well as removal of cats-claw creeper at foundation level, eliminating both the possibility for future structural damage as well as the control of water.

With regard to the numbering of the windows, columns and rafters, begin to count from the left of the elevation and proceed to the right.

Window number	type	No panes (replace)	Condition Upper portion	Condition lower portion	action
Window N1	Casement		good	good	Strip, repair and re-varnish
Window N2	Sash 6/6		good	good	Strip, repair and re-varnish
Door N1	french		good	good	Repair damage at lower hinge level
Door N2	french		good	good	none
Door N3	french		good	good	none

- Ventilator in roof- strip, replace all louvers with hardwood, prime and repaint. Ensure that the birds are removed from the roof space.
- Remove the finial, repair and replace.
- Strip all columns, treat and revarnish.
- The purlin on the beam shows rot between rafters 6 and 14. Strip, assess and repair where necessary, and repaint.
- The raking purlin shows damage between rafter 3 and 5. Strip, assess, repair if necessary and repaint.
- The central purlin shows itinerant damage along its length. Strip, assess, repair if necessary and repaint.
- Rafter no 6 shows termite damage at the junction with the beam. Strip, insert a piece of hardwood prime and repaint.
- Remove air-conditioner units

critical	necessary	cosmetic
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5.7 western elevation

Overall intention: general repair to elements

With regard to the numbering of the windows, columns and rafters, begin to count from the left of the elevation and proceed to the right.

Window number	type	No panes	Condition Upper	Condition lower	action
Window W1	casement		OK	OK	Strip, repair and re-varnish
Window W2	sash		good	good	Strip, and re-varnish
Window W3	sash		bad	bad	No rails at bottom, needs total repair and replacement of mullions and transoms on lower portion
Door W1	french		OK		Strip, and re-varnish
Door W2	Solid oregon		good		none

- Ventilator in roof- strip, replace all louvers with hardwood, prime and repaint. Ensure that the birds are removed from the roof space.
- Remove the finial, repair and replace
- Central purlin at end wall- damage- strip, assess all, repair and judiciously replace/patch.
- Purlin along beam damage- strip, assess all, repair and judiciously replace/patch
- Rafter 8- damage- strip, assess all, repair and judiciously replace/patch

5.8 Internal room by room assessment

For the purpose of this report, the rooms were numbered according to the figures below.

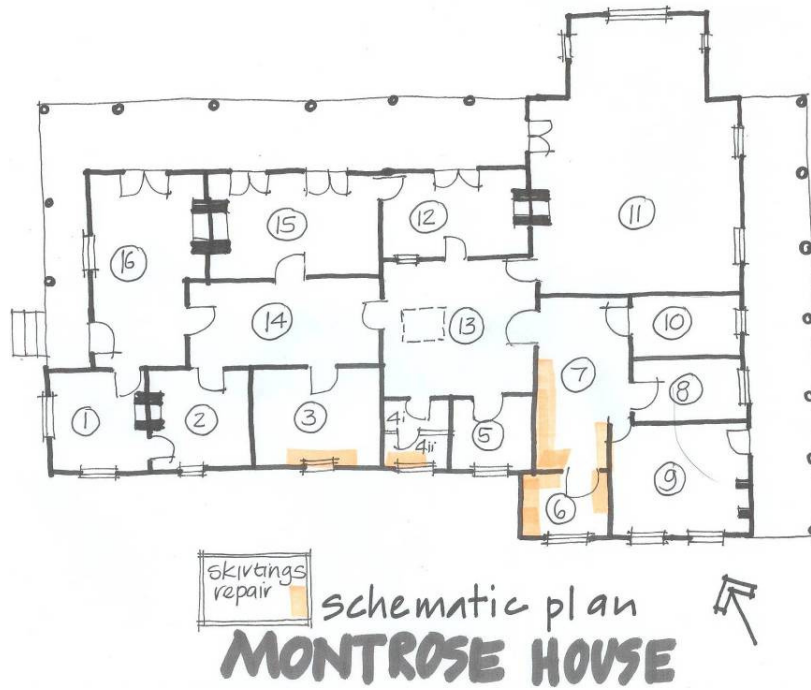


Fig 6: Skirtings repair

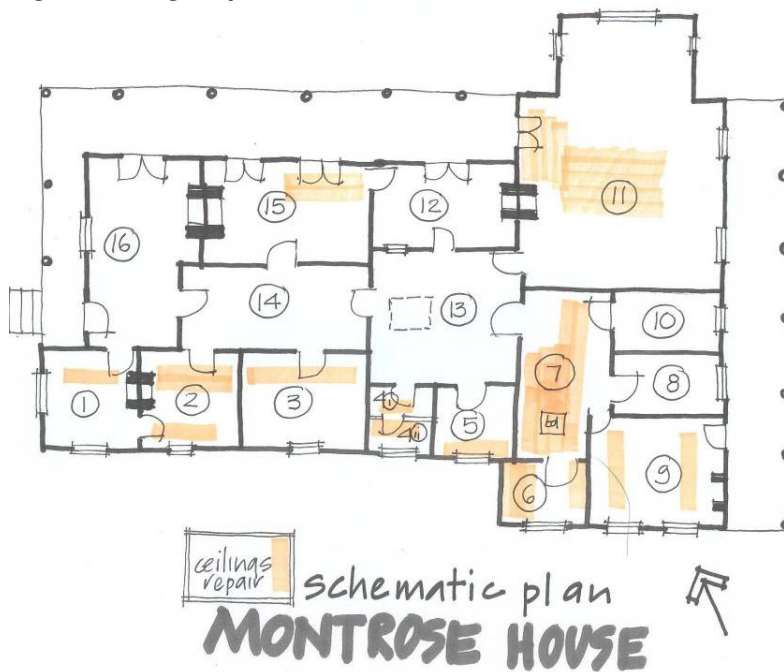


Fig 7: Ceiling repair

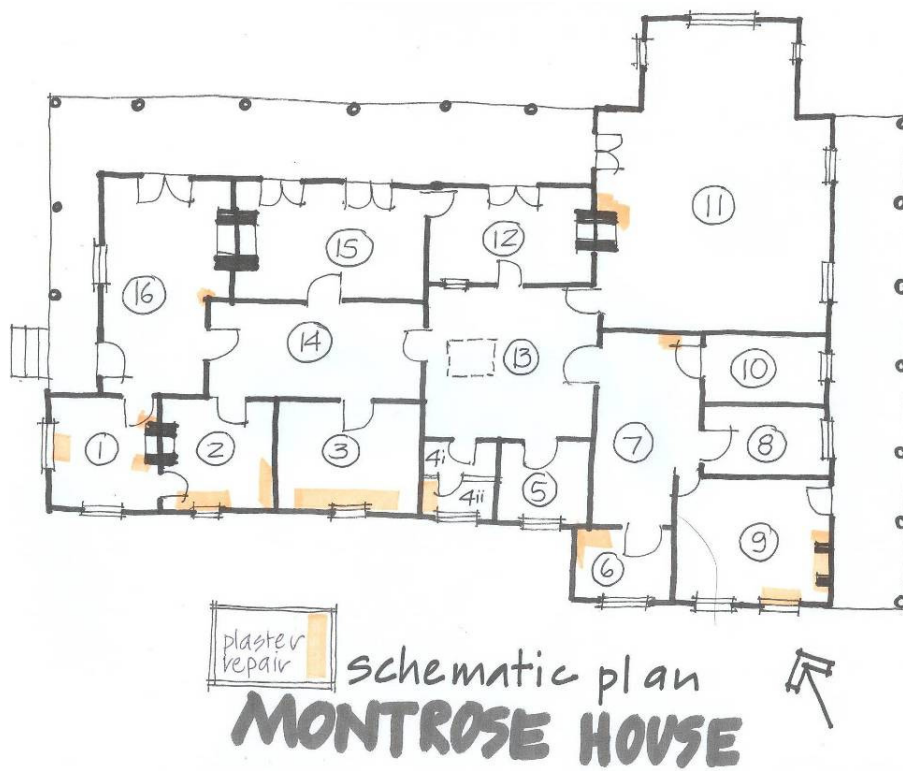


Fig 8: plaster repair

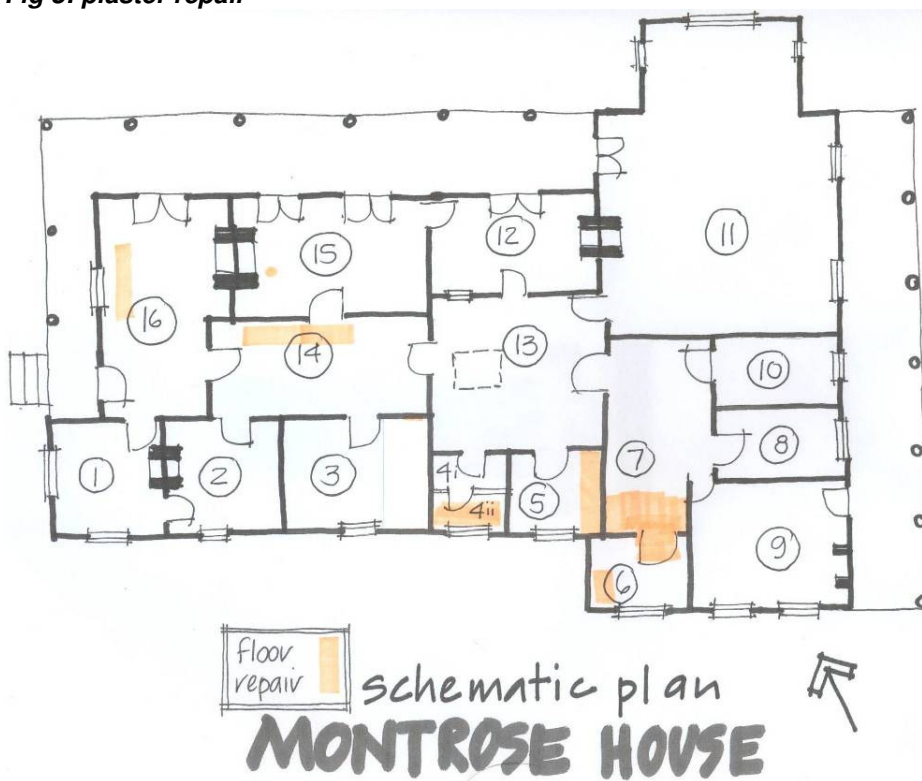


Fig 9: Floor repair

Room 1:

critical	necessary	cosmetic
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This is currently used by a group of leatherworkers as a workshop. The state of the room is reasonable. However, unconscious damage is being caused to the fabric by the occupants, where needle-holes have been pierced in the timber window sills. This should be remedied should the workers continue to use the room, and a thick piece of timber laid on top as a hard surface.

Removal of the air-conditioner is recommended. Once done, the walls should be made good.

Room 1	material	condition	comments	action
ceilings	Painted timber	damaged	Valley gutter	sand, judiciously repair, repaint.
cornices	Painted timber	reasonable		Re-paint.
Picture rails	none	none	none	none
Chair rails	none	none	none	none
Window sills	Oregon pine	damaged	Work stress	Sand, treat, re-varnish
Soffits /reveals	Oregon pine	reasonable	Wear and tear	Sand, treat Re-varnish
fireplace	Cast iron	good	loose	Bed in
Mantelpiece	Carved wood	Good/ loose		Bed in
electrics		mayhem		Remove, consolidate and make good
skirtings	Oregon pine	reasonable		Sections by fireplace to be removed and replaced.
paint				repaint
plaster		reasonable	Note places on diagram	Re-plaster under window and each side of fireplace
floors	Oregon pine	reasonable		none
Door frames	Oregon pine	reasonable		none

Room 2:

critical	necessary	cosmetic
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Note that we could not get access as the artist who is using the room as studio was not around with the only key. Thus, assessment was made through the window. Removal of the air-conditioner is recommended.

Room 2	material	condition	comments	action
ceilings	Painted timber	damaged	Valley gutter	Sand, judiciously repair and repaint.
cornices	Painted timber			repaint.
Picture rails	none	none	none	none
Chair rails	none	none	none	none
Window sills	Oregon pine	bad		Sand, treat, re-varnish
Soffits /reveals	Oregon pine	bad		Sand, treat, re-varnish
fireplace	Cast iron			Bed in if loose
Mantelpiece	Carver wood			Bed in if loose
electrics		Mayhem		Remove, consolidate, make good
skirtings	Oregon pine			repair if necessary
paint				repaint
plaster			Note diag.	Repair if needed
floors	Oregon pine	reasonable		none
Door frames	Oregon pine	reasonable		none

Room 3:

critical	necessary	cosmetic
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This room is currently being used as a display area for the house. It is recommended that the air-conditioner be removed, and that the wall behind it be re-plastered once this has happened. There is damage in the corner to the left of the window which is as a result of the cats-claw creeper. Removal of this can then result in the water damage being repaired. The cornice appears to have come loose, and should be removed, the plaster assessed and repaired if necessary, and the cornice replaced.

Room 3	material	condition	comments	action
ceilings	Painted timber	damaged	Valley gutter	sand, judiciously repair repaint.
cornices	Painted timber			repaint.
Picture rails	none	none	none	none
Chair rails	none	none	none	none
Window sills	Oregon pine			Sand and treat
Soffits /reveals	Oregon pine		Wear & tear	Sand and treat
fireplace	none	none	none	none
Mantelpiece	none	none	none	none
electrics		mayhem		Remove, consolidate, make good
skirtings	Oregon pine	Loose		Remove, and fix in place,
paint				repaint
plaster			Note diagram	Replaster section below window
floors	Oregon pine	good		none
Door frames	Oregon pine	reasonable		none

Room 4:

critical	necessary	cosmetic
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This consists of the lobby area and the men's toilet. The overriding sense here is of lack of appropriate planning of a wet core. In addition, the incursion of cats-claw creeper is damaging the window area. Suggestions are to remove the sink and the geyser, and remove the toilet and partition, and replace the toilet and a new hand basin. This can then work as a staff toilet and be used by both sexes. The floor has been replaced with linoleum which is now old and worn, and should be stripped, assessed and repaired.

Room 4	material	condition	comments	action
ceilings	Painted timber	Not good		sand, judiciously repair and repaint.
cornices	Painted timber	OK		repaint.
Picture rails	none	none		none
Chair rails	none	none		none
Window sills	Oregon pine	Not good	Wear & tear	sand, judiciously repair and repaint.
Soffits /reveals	Oregon pine	Not good	Wear& tear	sand, judiciously repair and repaint.
fireplace	none	none	none	none
Mantelpiece	none	none	none	none
electrics		mayhem		Remove, consolidate, make good
skirtings	Oregon pine, painted			Remove paint, repair, re-varnish.
paint			Peel below window	Strip old paint, paint on new mortar prime and repaint.
plaster			Crack in wall above basin-	Remove cats claw, reassess crack, repair if necessary
floors	Oregon pine & lino			Remove lino, assess floor, repair.
Door frames	Oregon pine	OK		

Room 5: (kitchen)

critical	necessary	cosmetic
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This room is currently being used as a kitchen. The problems caused by this as well as the lack of planning which is suffered in rooms 4i and 4ii and 6 can be resolved by the construction of an external wet core elsewhere on the property. The floors to the left hand side of the room appear to have had some bearer failure, and this may be supported by the voracious cats-claw creeper growing through the wall into the ladies toilet, room number 6, or effects of borer and or termites at sub floor level. Either way, this questions the safety of the position of the stove in this room and also against this particular wall.

The position of the plaster crack is also most probably attributed to the cats-claw creeper.

The air-conditioner should be removed and the plaster to the walls made good before repainting.

Room 5	material	condition	comments	action
ceilings	Painted timber	OK	OK	Scrape off paint, judiciously repair and repaint.
cornices	Painted timber	OK	remove	repaint
Picture rails	none	none	none	none
Chair rails	none	none	none	none
Window sills	Oregon pine	OK	Wear and tear	sand, treat re-varnish
Soffits /reveals	Oregon pine	OK	Wear and tear	sand, treat and re-varnish
fireplace	none	none	none	none
Mantelpiece	none	none	none	none
electrics		mayhem		Remove, consolidate, make good
skirtings	Oregon pine			Replace skirtings where AC has been removed.
paint				repaint
plaster		Not good	Crack above window, damage below. Damp in r/h corner	Remove plaster around crack, assess damage. If not cats-claw creeper, then consult.
floors	Oregon pine	OK-bearer failure on left of room	Cats claw removal	Remove boards, assess bearers, replace where necessary. Dig out cats-claw. Replace floor boards
Door frames	Oregon pine			none
Other-				Replace yale lock in door

Room 6: Ladies bathroom

critical	necessary	cosmetic
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This is currently used as the ladies toilet. The main concern is the cats-claw creeper growing through the wall, as well as the un-maintained toilet. Construction of a new external wet core will assist, as well as the removal of the cats-claw creeper.

Room 6	material	condition	comments	action
ceilings	Painted timber		Cats-claw damage	Scrape off paint, judiciously repair and repaint.
cornices	Painted timber			repaint.
Picture rails	none	none	none	none
Chair rails	none	none	none	none
Window sills	Oregon pine		Wear and tear	Sand, repair, re-varnish
Soffits /reveals	Oregon pine		Wear and tear	Sand, repair, re-varnish
fireplace	none	none	none	none
Mantelpiece	none	none	none	none
electrics		mayhem		Remove, consolidate make good
skirtings	Oregon pine	Not good.	Result of water, cats claw and borer beetle.	Skirting behind basin to be replaced, as well as rotten skirting at junction of walls and soil pipe. Borer infested skirtings must be treated by an appropriate professional. Suggest at the removal of all skirtings, scrape down, replace where necessary.
paint				repaint
plaster				Replaster where necessary
floors	Oregon pine	Reasonable except for bearer failure to the left of the doorway	Cats-claw removal	Remove floor boards, assess bearers and replace where necessary. Dig out cats-claw. Replace floor boards.
Door frames	Oregon pine	OK	Borer damage at base	Remove portion with borer beetle, replace with same.
Other-				Replace yale lock in door

Room 7: (passageway)

critical	necessary	cosmetic
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This is the passage into the ladies toilet. Here there is disturbing evidence of borer in the skirtings and the ceilings and floors are damaged, largely from water entering the roof through the corroded valley gutter, but also from the invasion of cats-claw creeper.

Room 7	material	condition	comments	action
ceilings	Painted timber			Scrape off paint, judiciously repair and repaint.
cornices	Painted timber			repaint
Picture rails	none	none	none	none
Chair rails	none	none	none	none
Window sills	none			none
Soffits /reveals	none			none
fireplace	none	none	none	none
Mantelpiece	none	none	none	none
electrics				Remove, consolidate, make good
skirtings	Oregon pine	OK	Borer beetle damage	Replace portions that are borer infested with Oregon pine skirtings of similar profile
paint				repaint
plaster		OK	damage from safe door handle	none
floors	Oregon pine	OK		none
Door frames	Oregon pine	OK		none

Room 8: cashier/reception

critical	necessary	cosmetic
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Room 8	material	condition	comments	action
ceilings	Painted timber			Scrape off paint, and repaint.
cornices	Painted timber			repaint
Picture rails	none	none	none	none
Chair rails	none	none	none	none
Window sills	Oregon pine and melamine on chip board			Remove melamine shelf, sand sill, treat and re-varnish. Repair window-replace sash cord.
Soffits /reveals	Oregon pine			Scrape down, treat and re-varnish
fireplace	none			none
Mantelpiece	none	none	none	none
electrics		mayhem		Remove, consolidate, make good
skirtings	Oregon pine	OK		none
paint				repaint
plaster				none
floors	Oregon pine			none
Door frames	Oregon pine			none

Room 9: Old Kitchen/ public entrance

critical	necessary	cosmetic
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Deciding on the use of this space is critical in the planning with regards to the removal of the partition and the hollow-core door that currently bars the public from entrance into office spaces.

Remove air conditioner from public zone.

Room 9	material	condition	comments	action
ceilings	Painted timber	OK		Repair area where break-in happened- strip, sand, repaint
cornices	Painted timber		Check cornice above pay hatch	repaint
Picture rails	none			none
Chair rails	none			none
Window sills	Oregon pine	OK		Scrape down, treat, re-varnish
Soffits /reveals	Oregon pine	OK		Scrape down, treat, re-varnish
fireplace	removed			none
Mantelpiece	none			none
electrics		mayhem		Remove, consolidate, make good
skirtings	vinyl			Remove, replace with hardwood, painted.
paint				repaint
plaster		Note diag.		Replaster patch and repaint
floors	Vinyl / quarry tiles		remove	Remove vinyl, assess quarry tiles, replace vinyl if irretrievable
Door frames	Oregon pine			Note repair/replacement of door lockset

Room 10: SAFE

critical	necessary	cosmetic
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The door onto the veranda has been closed up.

Room 10	material	condition	comments	action
ceilings	concrete	none	none	none
cornices	none	none	none	none
Picture rails	none	none	none	none
Chair rails	none	none	none	none
Window sills	none	none	none	none
Soffits /reveals	none	none	none	none
fireplace	none	none	none	none
Mantelpiece	none	none	none	none
electrics				Remove, consolidate & make good
skirtings	none	none	none	none
paint			none	none
plaster			none	none
floors	concrete		none	none
Door frames	steel	none	none	none
Other-				Replace collapsed shelf

Room 11: Main Office

critical	necessary	cosmetic
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The ceilings in this room have taken some strain from the valley gutters and flashing from the chimneys. They are softboard panels with cover strips and are thus not as durable as strip timber ceilings.

Room 11	material	condition	comments	action
ceilings	Painted softboard/ rhinoboard	OK	valley gutter	Suspect ceiling can be repainted
cornices	Painted timber			repaint
Picture rails	Oregon pine	Good		none
Chair rails	Oregon pine	good		none
Window sills	Oregon pine	Good		Scrape down, treat and re-varnish
Soffits /reveals	Oregon pine	good		Scrape down, treat and re-varnish
fireplace	Rusticated stone/plaster	OK		none
Mantelpiece	pine	OK		none
electrics				Remove, consolidate, make good
skirtings	Oregon pine	OK		none
paint				repaint
plaster				none
floors	Oregon pine	OK		none
Door frames	Oregon pine	OK		none

Room 12: Office

critical	necessary	cosmetic
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Removal of the air-conditioner is a recommendation. Otherwise, this room is in good condition.

Room 12	material	condition	comments	action
ceilings	Painted timber	good		repaint
cornices	Painted timber	good		repaint
Picture rails	none			none
Chair rails	none			none
Window sills	Oregon pine	good		none
Soffits /reveals	Oregon pine	good		none
fireplace	brick	good		none
Mantelpiece	Carved wood	good		none
electrics				Remove, consolidate, make good
skirtings	Oregon pine			Keep eye on hollow patch of skirting below the window
paint				repaint
plaster				none
floors				none
Door frames				none

Room 13 Internal passage with skylight (window into room 12)

		critical	necessary	cosmetic
Room 13	material	condition	comments	action
ceilings	Painted timber	bad	Damage from skylight	Sand, repair and repaint
cornices	Painted timber			repaint
Picture rails	none			none
Chair rails	none			none
Window	Oregon pine	good	Sash cord broken	Replace sash cord
Window sills	Oregon pine	good		none
Soffits /reveals	Oregon pine	good		none
fireplace	none	none	none	none
Mantelpiece	none	none	none	none
electrics		mayhem		Remove, consolidate, make good
skirtings	Oregon pine	good		none
paint				repaint
plaster		OK		Check out above door to room 14
floors	Oregon pine	good		none
Door frames	Oregon pine	Door eaten/ rat		none
Other- skylight	Painted t&g	Needs work		Scrape down, replace any material and repaint

Room 14 Internal passage without skylight

		critical	necessary	cosmetic
Room 14	material	condition	comments	action
ceilings	Painted timber	OK		sand and repaint
cornices	Painted timber			repaint
Picture rails	Partial Oregon pine	OK		none
Chair rails	none			none
Window sills	none			none
Soffits /reveals	none			none
fireplace	none			none
Mantelpiece	none			none
electrics				Remove, consolidate, make good
skirtings	Oregon pine	good		none
paint				repaint
plaster				none
floors	Oregon pine	good	Bouncy bearer	Remove board, bolt in supporting bearer, replace board
Door frames	Oregon pine	good		none

Room 15 Office/meeting room

critical	necessary	cosmetic
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Room 15	material	condition	comments	action
ceilings	Painted timber	Not good	Valley gutter	sand, assess damage, repair, repaint
cornices	Painted timber			repaint
Picture rails	none			none
Chair rails	none			none
Window sills	Oregon pine		French doors	none
Soffits /reveals	Oregon pine		French doors	none
fireplace	Cast iron			none
Mantelpiece	Carved timber			none
electrics		mayhem		Remove, consolidate, make good
skirtings	Oregon pine	OK		none
paint				repaint
plaster				none
floors	Oregon pine	OK	Hole near fireplace	none
Door frames	Oregon pine	OK		none

Room 16- drawing room

critical	necessary	cosmetic
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Room 16	material	condition	comments	action
ceilings	Painted softboard/rhinoboard	good		repaint
cornices	Painted timber	good		repaint
Picture rails	none			none
Chair rails	none			none
Window sills	Oregon pine	OK		none
Soffits /reveals	Oregon pine	OK		none
fireplace	Cast iron	good		None
Mantelpiece	Carved wood	good		none
electrics		mayhem		Remove, consolidate, make good
skirtings	Oregon pine	good		none
paint				repaint
plaster			see diag.	Replaster and repaint
floors	Oregon pine	Damage from object placed on floor	Remove object-store elsewhere	Sand down patch and reseal
Door frames	Oregon pine			none
Other-				

6. Design recommendations

Given the lack appropriateness of including the bathroom spaces within the building, it is suggested that the wet core be totally removed from the house, and, together with a kitchen and a store room, can form part of an outside structure. This means that any major incident which involves water and heating totally avoids the house.

Should the need arise to include one bathroom inside Montrose House for staff, it is suggested that this be carried out in the most sympathetic and modest manner possible.

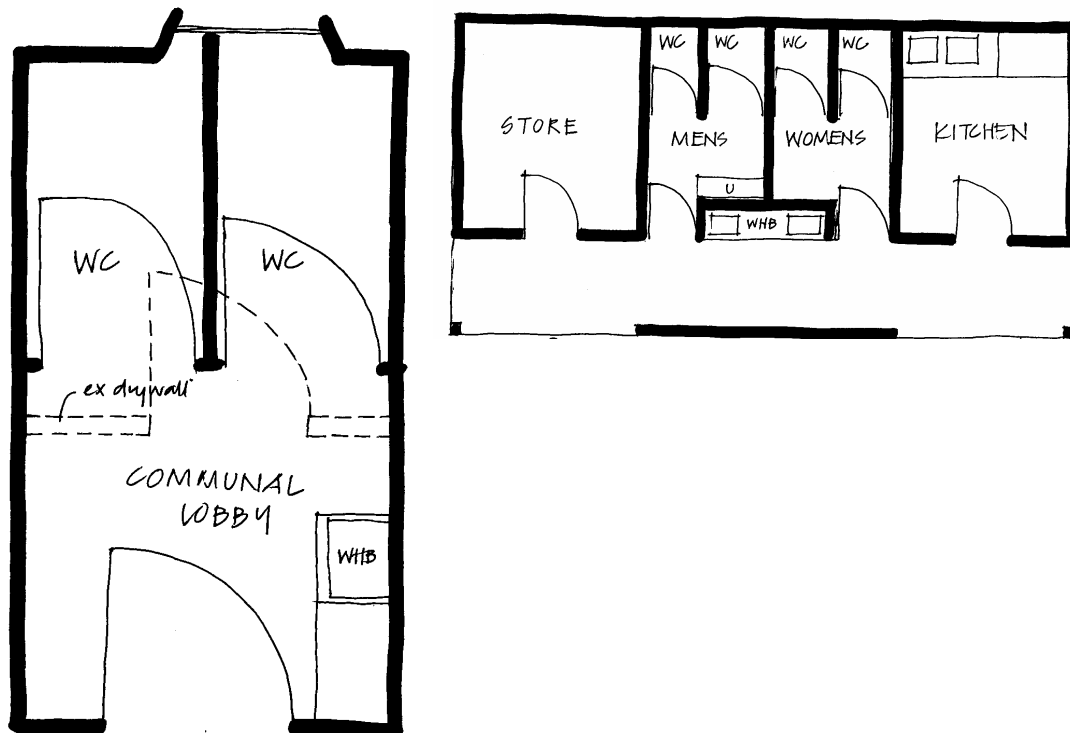


Fig 10: suggestion for reconfiguration of room 4 as a communal staff toilet

Fig 11: suggestion as to the provision of an outside wet core-storeroom

Another idea which can be implemented is the collection of rainwater in tanks which can be used in the garden or for the flushing of the toilets.

6. Operational recommendations and ongoing maintenance

The long-term manner in which a building is used by its inhabitants has a durable effect on the longevity of a structure. There are a number of operational recommendations which can be implemented, reducing both the loads on the flooring as well as the temperature loads on the house.

Floors:

As with most structures with timber floors, it is prohibited to wear high heels or stilettos. As the extant public space used for the payment of accounts is the only part of the floor which is not of timber construction, it is suggested that planning include this recommendation, and that this is the only area for direct public should Montrose House continue to be used as a Municipal Pay Point.

Recommendations:

The impact on the floors should be considered in any new internal planning.

Staff should be instructed accordingly and be instructed not to wear shoes with heels that may damage the floors.

Cleaning of the floors should be carried out with as little water as possible, and non-abrasive cloths used. The current situation of cleaning with a mixture of water and polish leaves build up and white marks everywhere.

The cleaning staff should be taught to look for the signs of termite and wood-borer activity, so that they can alert the management in necessary time.

Maintenance:

It is patent that much of the problem with the state of Montrose House at the moment is the lack of maintenance in the recent and distant past.

Recommendations:

A monthly assessment with the use of the appended and prepared checklist should be carried out of the building by the Municipal Works Department. It would also be a benefit if Amafa was to hold a workshop with community guides and people working in the house, regarding the monitoring of the building and the completion of check lists to be submitted to the Howick Museum and Amafa on a quarterly basis.

Temperature and Humidity control:

Given that this is a public building, part of which is intended shall form a museum, temperature control is justifiable. Consultation with air-conditioning professionals that can provide temperature control in as modest and as simple a manner possible, forms part of the contractual process. Mounting of units in as un-intrusive a manner as possible at ceiling level is preferable and the total minimization of external chillers is also recommended. Limiting the possibilities for water damage is a prime objective.

Recommendations:

Continuous temperature and humidity control should be implemented. The constant setting should be in accordance with approved museum operational guidelines.

7. Appropriate contractors and monitoring

Given the intended application as a Provincial Heritage Landmark, in addition to Montrose House falling under the blanket protection of the Provincial Heritage no 10 of 1997, any work that will be undertaken on the project is only likely to be approved by *Amafa aKwaZulu-Natali* should the tenders specifically be called from contractors that have experience in the repair to old buildings and historic structures.

It is particularly requested that contractors with a record for judicious repair and understanding of materials be approached for tender awards.

8. References

- Dorning, D (1997) *Chimneys in the Clouds*
Howick, Brevitas
- Kearney, B (1989) *Verandas in the mist- the architecture of the Dargle, Howick and Karkloof*
Pietermaritzburg, National Monuments Council